Upgrade Compatibility Tool

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Pro Magento Meetup

2022 release and EOS schedule

Nov '21
Beta2 2.4.4

Jan '22
Beta4 2.4.4

Apr '22
2.4.4, 2.4.3-p1,
2.3.7-p3 release

Aug '22 2.4.5,
2.4.4-p1, 2.4.3-p3,
2.3.7-p4 release

Oct '22
2.4.5-p1 release

Oct '21
Beta1 2.4.4

Dec '21
Beta3 2.4.4

Mar '22
2.4.4
pre-release

Sep '22
2.3 EOS

Nov '22
2.4.0-2.4.3 EOS
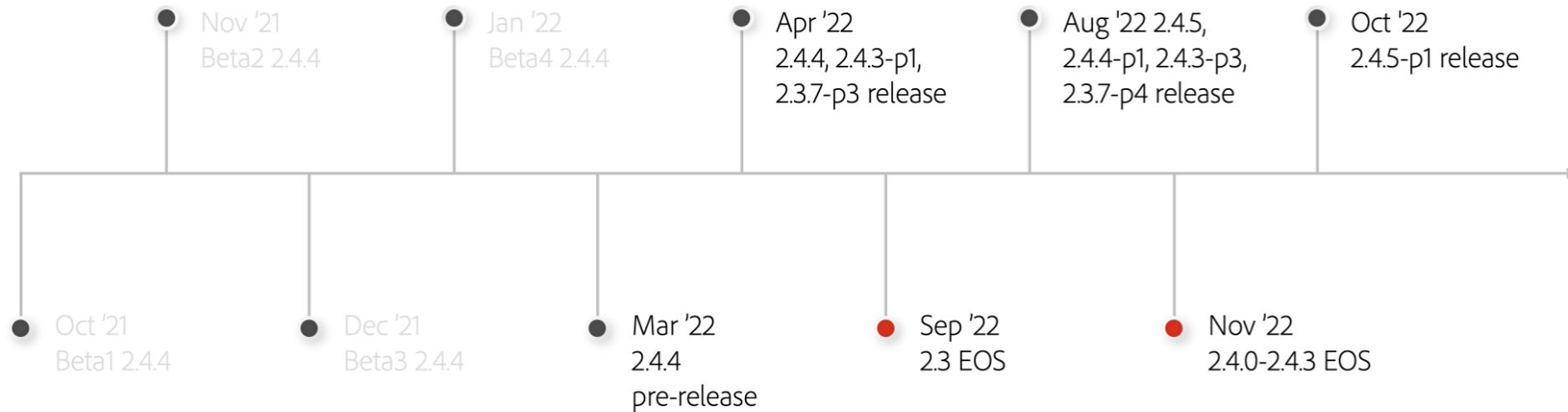
- Based on 2.3-2.4.3 EOS events, it is important to upgrade to version 2.4.4 or higher by November 2022

- In line with the Adobe Commerce lifecycle policy, versions 2.4.4 and 2.4.5 will receive quality support and security patches until Nov 2024

- https://experienceleague.adobe.com/docs/commerce-operations/upgrade-guide/overview.html

Adobe

Upgrade Compatibility Tool

Upgrade Compatibility Tool

Merchant/partner Software Engineer

Download Upgrade Compatibility Tool

Run Upgrade Compatibility Tool

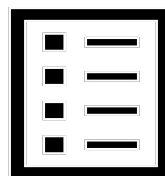Adobe Commerce 2.3.6

Merchant Adobe Commerce

Upgrade Compatibility Tool

Adobe Commerce 2.4.4

Latest Adobe Commerce

Development pipeline

Magento PHPStorm plugin + UCT

Compare & validate

PHP implementation compatibility
GraphQL schema
Core code modifications
Unified Static Tests

List of compatibility issues

Code fix

Ready for Upgrade

Easier, faster and cheaper upgrades

- Estimate upgrades to any version
- Improve project quality and resolve breaking changes
- Use as part of CICD to proactively prevent issues from ever occurring
- Under active development with frequent improvements

Adobe

Validations

- **Removed** core code usages

- References to **non-API** core code

  - under the risk of being changed of removed

- **Deprecated** code usage

  - incorrect, not supported and planned to be removed

- **Additional** static tests

  - Important rules from magento-coding-standard

  - compatibility, security, PHP 8.1 compatibility

Reporting

- CLI report

  - Instant feedback

- JSON report

  - Makes integrations easier

- HTML report

  - Perfect for high-level evaluation of complex projects

Current version	2.4.1
Target version	2.4.4-beta2
Modules that require update	78.33% (47/60)
Files that require update	20.30% (108/532)
Total critical issues	35
Total errors	194
Total warnings	103

Diagrams

Modules by issue severity

This chart shows a severity distribution by modules.

Each chart portion shows the percentage of modules which have issues of that level at most.

- Modules without issues
- Modules with warnings
- Modules with errors
- Modules with critical issues
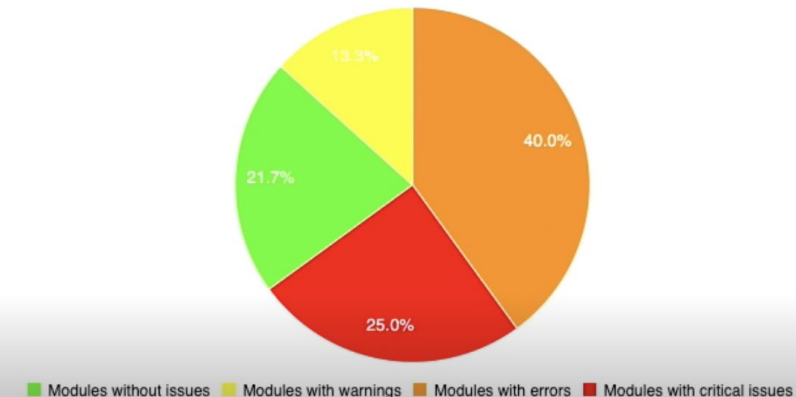
Additional functionality and options

- Core code modification detection

  - Useful even for listing additional composer dependencies

- GraphQL schema comparison

  - Lists all the differences between two endpoints

- Options to filter results and display only breaking changes

  - Or the level of quality that is needed

A few things

- Upgrade Compatibility Tool requires Commerce composer key
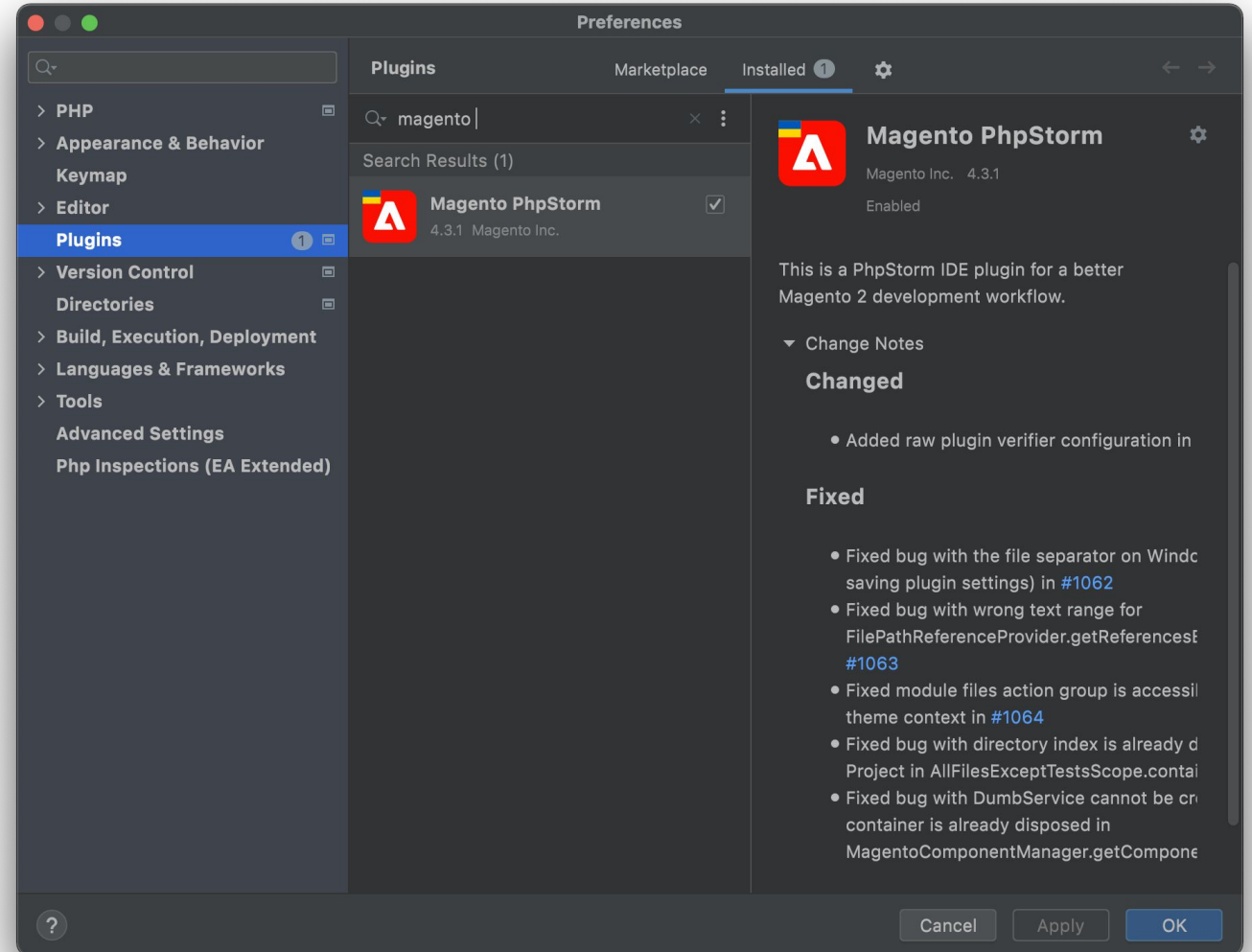
- Currently UCT covers mostly PHP code, however, the project is in active development and we are working to extend the coverage

PHPStrom Plugin
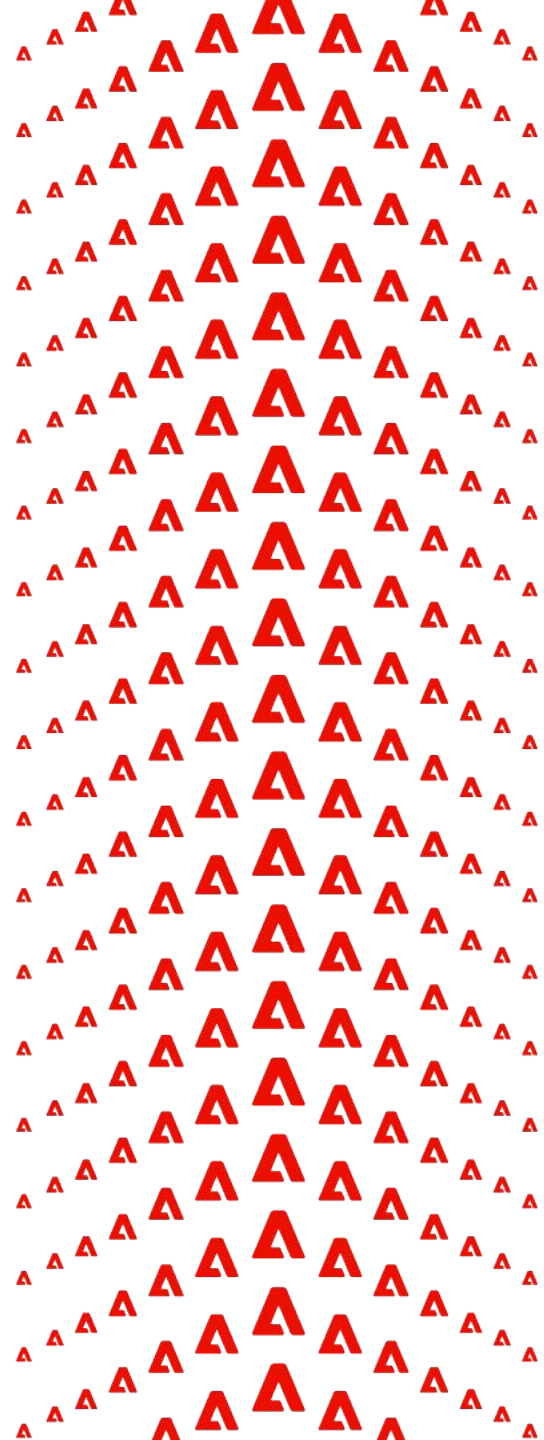
The Project

- Turbocharged Magento development!

- Available on JetBrains marketplace

  - Possible to download from the website

  - Or via PHPStrom preferences

- Already installed 120 thousand times

- Great feedback

Functionality

- Code generation

  - Module and lots of common files templates

- Code inspections

  - Ensures xml and php are on the same page

- Improved referencing, mapping and navigation

- Helps to work with php, js, xml and even graphqls files
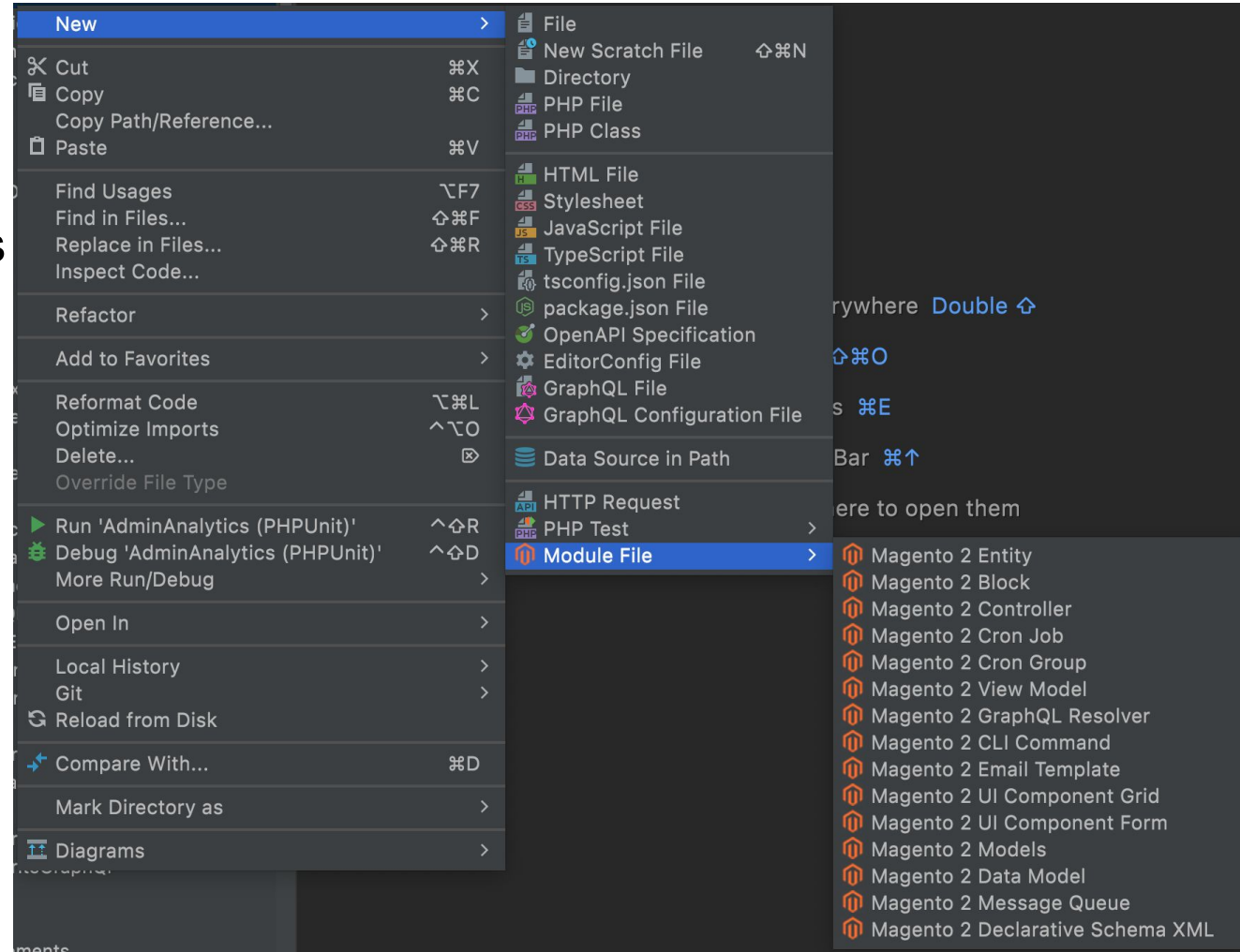
UCT & PHPStorm Plugin

- Run configuration for Upgrade Compatibility Tool CLI

  - Save the setting once and work on upgrde
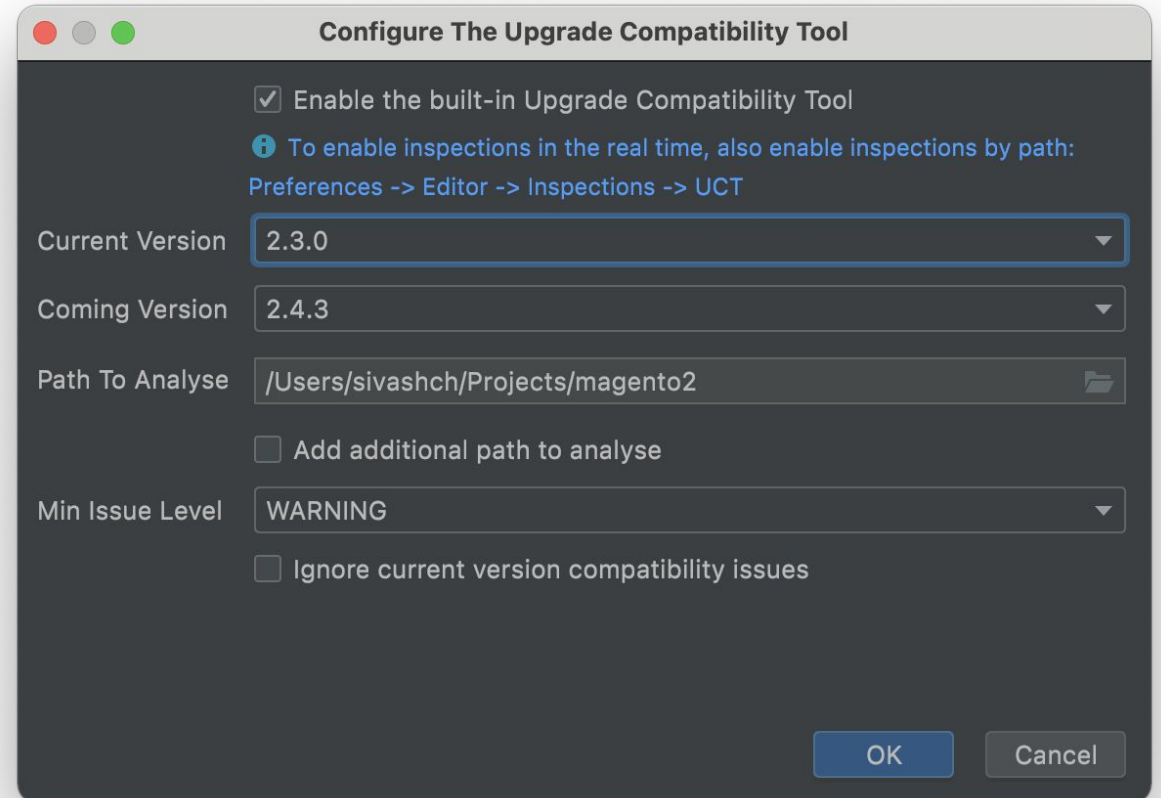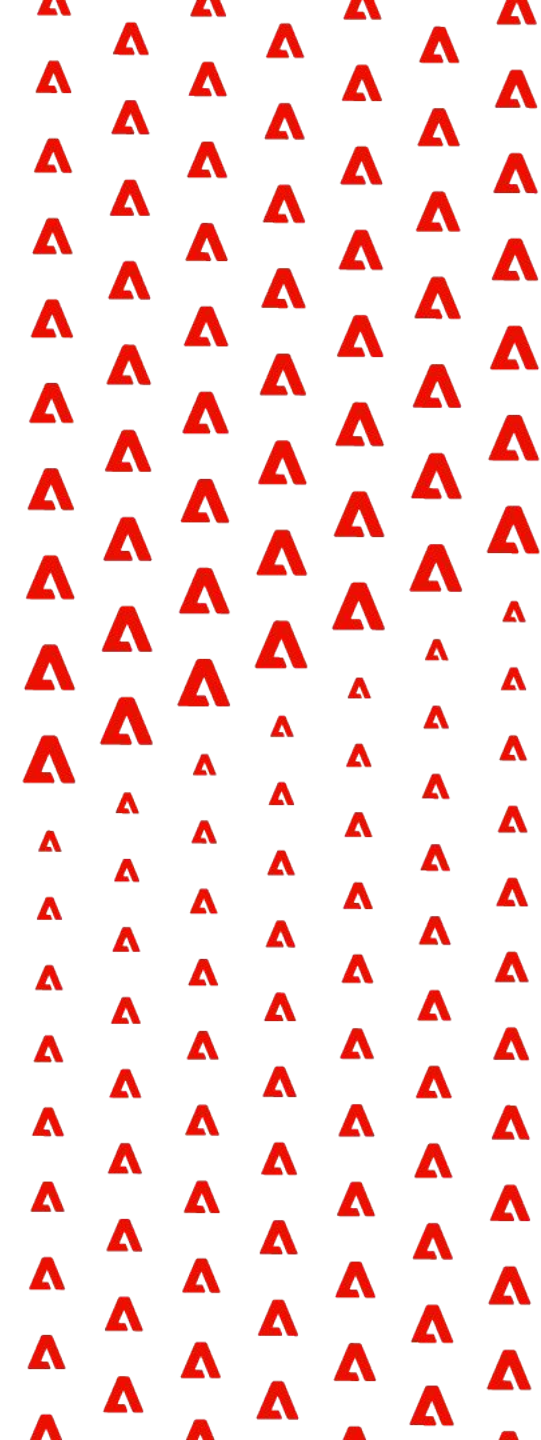
- Upgrade Compatibility code Inspections

  - Remove, deprecated and non-api code detection

  - Flexible configuration and fast execution, 3 ways of launching as a bonus

Configure The Upgrade Compatibility Tool

☑ Enable the built-in Upgrade Compatibility Tool

ⓘ To enable inspections in the real time, also enable inspections by path:
Preferences -> Editor -> Inspections -> UCT

Current Version	2.3.0
Coming Version	2.4.3
Path To Analyse	/Users/sivashch/Projects/magento2

☐ Add additional path to analyse

Min Issue Level	WARNING

☐ Ignore current version compatibility issues

OK   Cancel

Let's collaborate!
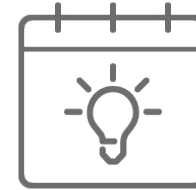
Collaboration stages ☺

Utilize

- Install the plugin from PHPStrom marketplace (and stay tuned for updates)

- Download UCT via composer (requires Adobe Commerce keys)

Communicate

- Magento Open Source slack workspace

- #upgrade-compatibility-tool

- #phpstorm-plugin

Participate

- Contribute static tests to the magento-coding-standard

- Join the completely community driven PHPStorm Plugin project

Screenshot this!

- Slack self signup: https://www.adobe.io/open/magento/slack

  - **#upgrade-compatibility-tool** and **#phpstorm-plugin** channels

- PHPStorm Plugin

  - https://github.com/magento/magento2-phpstorm-plugin/wiki - I'd check the wiki ;)

  - https://plugins.jetbrains.com/plugin/8024-magento-phpstorm (or Preferences -> Plugins -> Marketplace)

- Upgrade Guide (loads of useful info including UCT docs):

  - https://experienceleague.adobe.com/docs/commerce-operations/upgrade-guide/overview.html

Artwork by **Davy Evans** / UK